

RE: CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
DN 1996:705078 CAPLUS
DN 126:59184
TI Development of supramolecular metalloprotein mimics
AU Strijdonck, G. P. F.; Martens, C. F.; Nolte, R. J. M.
CS Dep. Org. Chem., Univ. Nijmegen, Nijmegen, 6525 ED, Neth.
SO Pure and Applied Chemistry (1996), 68 (11), 2163-2170
CODEN: PACHAS; ISSN: 0033-4545
PB Blackwell
DT Journal; General Review
LA English
L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:430763 CAPLUS
DN 107:38763
TI Catalytic reactions of metalloporphyrins. 3. Catalytic modification of hydroboronation-oxidation of olefins with rhodium(III) porphyrin as catalyst
AU Aoyama, Yasuhiro; Tanaka, Yasutaka; Fujisawa, Takeshi; Watanabe, Takamichi; Toi, Hiroo; Ogoshi, Hisanobu
CS Dep. Mater. Sci. Technol., Technol. Univ. Nagaoaka, 940-21, Japan
SO Journal of Organic Chemistry (1987), 52 (12), 2555-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 107:30763
L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:521857 CAPLUS
DN 99:121857
TI Efficient olefin oxygenation with tetrahydroborate and dioxygen catalyzed by a rhodium porphyrin complex
AU Aoyama, Yasuhiro; Watanabe, Takamichi; Onda, Hiroyuki; Ogoshi, Hisanobu
CS Dep. Mater. Sci. Technol., Univ. Nagaoaka, Niigata, 949, Japan
SO Tetrahedron Letters (1983), 24 (11), 1183-6
CODEN: TLELEY; ISSN: 0040-4039
DT Journal
LA English
L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1982:223242 CAPLUS
DN 96:225242
TI Selective electrooxidation of carbon monoxide with carbon-supported rhodium and iridium porphyrins at low potentials in acid electrolyte
AU Van Baar, J. F.; Van Veen, J. A. R.; De Wit, N.
CS K / Shell-Lab., Shell Res. B. V., Amsterdam, Neth.
SO Electrochimica Acta (1982), 27 (1), 57-9
CODEN: EICAAV; ISSN: 0013-4686
DT Journal
LA English

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'IS' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DNALL ----- MAX, delimited for post-processing
DNMAX ----- AN, PI and PRAI in table, Plus Patent Family data
EPIB ----- AN, BIB, plus Patent PAM
IND ----- AN, plus Patent PAM
Indexing data
IPC ----- ALL, plus Patent PAM, RE
MAX ----- ALL, plus Patent PAM
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS

TABS ----- ABS, indented with text labels
ITALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
OBIBB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SBIBB ----- IBIB, no citations

HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
HITLN ----- HIT RN and its text modification, its CA index name, and containing hit terms
HITSTR ----- HIT RN, its text modification, its CA index name, and its structure diagram
HITSEQ ----- HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
KHIC ----- Hit term plus 20 words on either side
OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELD at an arrow prompt (>). Examples of formats include: T; TI; AU; BIB; ST; TI; IND; TI; SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

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(FILE 'HOME' ENTERED AT 07:58:26 ON 17 JAN 2006)

FILE 'CAPLUS' ENTERED AT 08:05:25 ON 17 JAN 2006

L1 169 S RHODIUM PORPHIRIN
L2 5 S LI AND OXIDATION CATALYST

=> s 11 not 12
L3 164 L1 NOT L2

- => s 11 and superior and conventional
 144991 SUPERIOR
 11 SUPERIORS
 145001 SUPERIOR
 (SUPERIOR OR SUPERIORS)
- L4 360292 CONVENTIONAL
 17 CONVENTIONALS
 360303 CONVENTIONAL
 (CONVENTIONAL OR CONVENTIONALS)
 0 L1 AND SUPERIOR AND CONVENTIONAL
- => s 11 and superior
 144991 SUPERIOR
 11 SUPERIORS
 145001 SUPERIOR
 (SUPERIOR OR SUPERIORS)
- L5 => s 11 and advantageous
 26567 ADVANTAGEOUS
 L6 0 L1 AND ADVANTAGEOUS
- => s 11 and sulf?
- L7 1679066 SULF?
 13 L1 AND SULF?
- => d 1-13
- L7 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:117123 CAPLUS
 TI Thermodynamics of Rhodium Hydride Reactions with CO, Aldehydes, and
 Olefins in Water: Organo-Rhodium **Porphyrin** Bond
 DIssociation Free Energies
 AU Fu, Xuefeng; Wayland, Bradford B.
 CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA,
 19104-6323, USA
 SO Journal of the American Chemical Society (2005), 127(47), 16460-16467
 CODEN: JACSAU; ISSN: 0021-7863
 PB American Chemical Society
 DT Journal
 LA English
 RE. CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE IN THE RE FORMAT
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L7 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:166176 CAPLUS
 TI Equilibrium thermodynamic studies for reactions of rhodium
porphyrin hydride with CO, aldehydes and olefins in aqueous media
 AU Fu, Xuefeng; Wayland, Bradford B.
 CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA,
 19104, USA
 SO Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United
 States, August 22-26, 2004, INOR-600 Publisher: American Chemical
 Society, Washington, D. C.
 CODEN: E9FTZ8
 DT Conference; Meeting Abstract
 LA English
- L7 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:354167 CAPLUS
 DN 141:321728
 TI Spectral properties of cationic water-soluble metalloporphyrins
 immobilized in a perfluorosulfonated ion-exchange membrane
 AU Vasil'ev, Victor V.; Borisov, Sergey M.; Maldotti, Andrea; Molinari,
- Alessandra Department of Chemistry, Russian State Pedagogical University, St.
 CS Petersburg, 191186, Russia
 SO Journal of Porphyrins and Phthalocyanines (2003), 7(11 & 12), 780-786
 CODEN: JPPHZF; ISSN: 1088-4246
 PB Society of Porphyrins & Phthalocyanines
 DT Journal
 LA English
 RE. CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L7 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:87921 CAPLUS
 DN 140:310322
 TI Equilibrium Thermodynamic Studies in Water: Reactions of Dihydrogen with
 Rhodium(III) Porphyrins Relevant to Rh-Rh, Rh-H, and Rh-OH Bond Energies
 AU Fu, Xuefeng; Wayland, Bradford B.
 CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA,
 19104-6323, USA
 SO Journal of the American Chemical Society (2004), 126(8), 2623-2631
 CODEN: JACSAU; ISSN: 0021-7863
 PB American Chemical Society
 DT Journal
 LA English
 RE. CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L7 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:551347 CAPLUS
 DN 139:111611
 TI Porphyrins with virucidal activity, and use in the treatment of sexually
 transmitted diseases
 IN Compans, Richard W.; Marzilli, Luigi G.; Sears, Amy E.; Dixon, Dabney W.
 Emory University, USA; Georgia State University Research Foundation, Inc.
 SO PCT Int. Appl., 62 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN. CNT 1
 PATENT NO. ----
 WO 2003057176 A2 20030717
 WO 2003057176 A3 20040916
 PI WO 2003057176 A2 20030717
 WO 2003057176 A3 20040916
 W: AE, AG, AL, AM, PT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LC, LR, MZ,
 LS, LT, LV, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, ON, PH,
 PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UR, US, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, ES,
 FI, FR, GB, GR, HU, IE, IT, PT, SE, SI, SK, TR, BF,
 CA 2472583 BJ, CF, CG, CI, CM, GA, GN, GQ, GH, ML, MR, NE, SN,
 EP 1480638 AA 20041201
 EP 2003-2472583 AA 20030717
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AU, TR, BG, CZ, EE, HU, SK
 US 2005090428 A1 20050428
 PRAI US 2002-347197 P 20020108
 OS MARPAT 139:11611
 L7 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:187313 CAPLUS
 TI Aqueous organometallic reactions of rhodium porphyrins

- AU Fu, Xuefeng; Wayland, Bradford B.
 CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA,
 19104-6323, USA
 SO Abstracts of Papers, 225th ACS National Meeting, New Orleans, LA, United
 States, March 23-27, 2003 (2003), INOR-670 Publisher: American Chemical
 Society, Washington, D. C.
 CODEN: 68DSX4
 DT Conference; Meeting Abstract
 LA English
- L7 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:107410 CAPLUS
 TI Aqueous organometallic reactions of **rhodium porphyrins**
 : equilibrium thermodynamics
 AU Fu, Xuefeng; Basickes, Leah; Wayland, Bradford B.,
 Department of Chemistry, University of Pennsylvania, Philadelphia, PA,
 19104-6323 USA
 SO Chemical Communications (Cambridge, United Kingdom) (2003), (4), 520-521
 CODEN: CHCOPX; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS C2R3ACT 139:63353
 RE-CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L7 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2002:617757 CAPLUS
 TI Aqueous water-soluble β -octafluorinated porphyrins
 AU Biffinger, Justin C.; Sun, Haoran; DiMaggio, Stephen G.,
 Department of Chemistry, University of Nebraska, Lincoln, NE, 68588-0304,
 USA
 SO Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United
 States, August 18-22, 2002 (2002), INOR-605 Publisher: American Chemical
 Society, Washington, D. C.
 CODEN: 68CZP2
 DT Conference; Meeting Abstract
 LA English
- L7 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2000:330952 CAPLUS
 TI Aqueous organometallic reactions of **rhodium porphyrins**
- AU Basickes, Leah; Wayland, Bradford B.,
 Department of Chemistry, University of Pennsylvania, Philadelphia, PA,
 19104-6323, USA
 SO Book of Abstracts, 219th ACS National Meeting, San Francisco, CA, March
 26-30, 2000 (2000), INOR-190 Publisher: American Chemical Society,
 Washington, D. C.
 CODEN: 68CLAC
 DT Conference; Meeting Abstract
 LA English
- L7 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1998:335602 CAPLUS
 TI Behavior of rhodium(III) complexes with water-soluble porphyrins in
 solutions
 AU Golovina, I. V.; Vasil'ev, V. V.
 CS Gertsen State Pedagogical University, St. Petersburg, Russia
 SO Koordinacionnaya Khimiya (1998), 24(6), 412-415
 CODEN: RUCCY; ISSN: 1070-3284
 PB MAIK Nauka/Interperiodica Publishing
- DT Journal
 LA English
 RE-CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L7 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1996:703078 CAPLUS
 TI Development of supramolecular metalloprotein mimics
 AU Feiters, M. C.; Gebbink, R. J. M. Klein; Schenning, A. P. H. J.; van
 Strijdonck, G. P. F.; Martens, C. F.; Nolte, R. J. M.
 CS Dep. Org. Chem., Univ. Nijmegen, Nijmegen, 6520 ED, Neth.
 SO Pure and Applied Chemistry (1996), 68(11), 2163-2170
 CODEN: PACHAS; ISSN: 0033-4545
 PB Blackwell
 DT Journal; General Review
 LA English
- L7 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:652383 CAPLUS
 DN 119:252383
 TI Reactions of metal ion complexes with lignin model compounds. Part III.
 Rh(TSPP) catalyzed formation of guaiacol from β -aryl ethers in
 exceptionally high yield
 AU Watson, Paul A.; Wright, L. James; Fullerton, Terry J.
 CS Dep. Chem., Univ. Auckland, Auckland, N. Z.
 SO Journal of Wood Chemistry and Technology (1993), 13(3), 411-428
 CODEN: JWCNDJ; ISSN: 0277-3813
 DT Journal
 LA English
- L7 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1985:194962 CAPLUS
 DN 100:194962
 TI Radioolytic studies of the redox reactions and alkylation of rhodium
 tetrakis(4-sulfonatophenyl)porphyrin in aqueous solutions
 AU Barai, S.; Hambricht, P.; Harriman, A.; Nata, P.
 CS Radiat. Lab., Univ. Notre Dame, Notre Dame, IN, 46556, USA
 SO Journal of Physical Chemistry (1985), 89(10), 2037-42
 CODEN: JPCHAX; ISSN: 0022-3654
 DT Journal
 LA English
- => d abs 9
- L7 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1985:194962 CAPLUS
 TI Reactions of rhodium porphyrins with small mol. substrates in water were
 performed and the equilibrium consts. for these reactions were determined
 Rhodium
 tetra(4-sulfonatophenyl)porphyrin [(TSPP)Rh], reacts with
 dihydrogen, carbon monoxide and olefins in water to form the hydride,
 formyl and β -hydroxy alkyl derivs. Results from these studies will
 be presented in the context of substrate reactions of rhodium
 porphyrins with dihydrogen, carbon monoxide and ethene in non-aqueous
 media.
- => s sulfamidat? and porph?
 111 SULFAMIDAT?
 69668 PORPH?
 4 SULFAMIDAT? AND PORPH?
 L8
 => d 1-4

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:1019826 CAPLUS
 DN 142:5560
 TI Intramolecular amidation of sulfamates 1,2,3-oxathiazolidine-2,2-dione and metalloporphyrins
 Che, Chi-Ming; Liang, Jiang-Lin; Yuan, Shi-Xue; Huang, Jie-Sheng; Yu, Wing-Yiu; Che, Chi-Ming
 Department of Chemistry and Open Laboratory of Chemical Biology of the Institute of Molecular Technology for Drug Discovery and Synthesis, The University of Hong Kong, Hong Kong, Hong Kong
 U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 202,581.
 CODEN: ACIEFS; ISSN: 1433-7851
 DT Patent
 LA English
 FAN CNT 2
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ---- -- 20041125 US 2004-790810
 PI 2004:236059 A1 20040303
 US 2004019204 A1 20020723
 PRAI US 2002-202581
 OS MARPAT 142:5560
 L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:363764 CAPLUS
 DN 141:123207
 TI Intramolecular C-N Bond Formation Reactions Catalyzed by Ruthenium Porphyrins: Amidation of Sulfamate Esters and Azoxydination of Unsaturated Sulfonamides
 Liang, Jiang-Lin; Yuan, Shi-Xue; Huang, Jie-Sheng; Che, Chi-Ming
 Department of Chemistry and Open Laboratory of Chemical Biology, Institute of Molecular Technology for Drug Discovery and Synthesis, University of Hong Kong, Hong Kong
 Journal of Organic Chemistry (2004), 69(11), 3610-3619
 CODEN: JOCEAH; ISSN: 0022-3223
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREFACT 141:123207
 RE CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:76042 CAPLUS
 DN 140:128437
 TI Preparation of cyclic sulfamides by metalloporphyrin-catalyzed oxidative intramolecular amidation of sulfamate esters.
 Che, Chiming; Liang, Jianglin
 The University of Hong Kong, Peop. Rep. China
 Eur. Pat. Appl., 16 pp.
 CODEN: EPXKDW
 DT Patent
 LA English
 FAN CNT 2
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ---- -- 20040128 EP 2003-102223
 PI EP 1384718 A1 20030718
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2004:019204 A1 2002-202581
 PRAI US 2002-202581
 OS CASREFACT 140:128437 A 20020723
 RE CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2002:756471 CAPLUS
 DN 138:187747

TI Highly diastereo- and enantioselective intramolecular amidation of saturated C-H bonds catalyzed by ruthenium **Porphyrins**
 AU Liang, Jiang-Lin; Yuan, Shi-Xue; Huang, Jie-Sheng; Yu, Wing-Yiu; Che, Chi-Ming
 CS Department of Chemistry and Open Laboratory of Chemical Biology of the Institute of Molecular Technology for Drug Discovery and Synthesis, The University of Hong Kong, Hong Kong, Hong Kong
 SO Angewandte Chemie, International Edition (2002), 41(18), 3465-3468
 CODEN: ACIEFS; ISSN: 1433-7851
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREFACT 138:187747
 RE CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s porphyrin and superior and conventional and catalytic?

OS 3445 PORPHYRIN
 24054 PORPHYRINS
 40529 PORPHYRIN (PORPHYRIN OR PORPHYRINS)
 144981 SUPERIOR
 145001 SUPERIOR
 11 SUPERIORS
 145001 SUPERIOR
 360292 (SUPERIOR OR SUPERIORS)
 360292 CONVENTIONAL
 17 CONVENTIONALS
 360303 CONVENTIONAL
 (CONVENTIONAL OR CONVENTIONALS)
 L9 1289814 CATALYST?
 => d
 L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:496146 CAPLUS
 DN 131:296350
 TI Synthesis of meso-tetra-(3,5-dibromo-4-hydroxyphenyl)- **Porphyrin** and its application to second-derivative spectrophotometric determination of lead in clinical samples
 AU Li, Zaijun; Zhu, Zhengzhong; Tang, Jian; Pan, Jiamao
 CS Dep. Chem. Eng., Wuxi University of Light Industry, Wuxi, 214036, Peop. Rep. China
 SO Analyst (Cambridge, United Kingdom) (1999), 124 (8), 1227-1231
 CODEN: ANALD; ISSN: 0003-2654
 PB Royal Society of Chemistry
 DT Journal
 LA English
 RE CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s metalloporphyrin catalysts
 3731 METALLOPORPHYRIN
 5569 METALLOPORPHYRINS
 6995 METALLOPORPHYRIN
 713563 CATALYSTS
 1 CATALYSTS
 713563 CATALYSTS
 (CATALYSTS OR CATALYSTSES)
 L10 121 METALLOPORPHYRIN (W) CATALYSTS
 (METALLOPORPHYRIN (W) CATALYSTS)

- => s 110 and rhodium
 67191 RHODIUM
 31 RHODIUMS
 67192 RHODIUM
 (RHODIUM OR RHODIUM)
- L11 3 110 AND RHODIUM
- => d 1-3
- L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1995:27111 CAPLUS
 DN 122:159/97
 TI Carbene insertion into oxygen-hydrogen bonds by **metalloporphyrin catalysts**
 AU Hayashi, Takashi; Kato, Tomoko; Asai, Tomohito; Ogoshi, Hisanobu
 CS Department of Synthetic Chemistry and Biological Chemistry, Faculty of Engineering, Kyoto University, Sakyo-ku, Kyoto, 606-01, Japan
 SO Journal of Organometallic Chemistry (1994), 473 (1-2), 323-7
 CODEN: JORCAI; ISSN: 0022-328X
 DT Journal
 LA English
 OS CASREACT 122:159797
- L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:494107 CAPLUS
 DN 119:94/07
 TI Processes for producing carbamates and isocyanates
 IN Leung, Tak W; Dombek, Bernard D.
 PA Union Carbide Chemicals and Plastics Technology Corp., USA
 SO U.S., 13 pp.
 CODEN: USXXAM
- DT Patent
 LA English
 FAN CNT 1
 PATENT NO. ---- A ---- KIND DATE APPLICATION NO. DATE ----
 PI US 5394660 A 1993/03/16 US 1990-631962 1990/12/21
- PRAL US 1990-631962
 OS CASREACT 119:94/07
- L11 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1989:461960 CAPLUS
 DN 111:64/960
 TI Method for supporting metallocporphyrins on polybenzimidazole porous articles for catalysts
 IN Shephard, James P.
 PA Hoechst Celanese Corp., USA
 SO U.S., 10 pp.
 CODEN: USXXAM
- DT Patent
 LA English
 FAN CNT 1
 PATENT NO. ---- A ---- KIND DATE APPLICATION NO. DATE ----
 PI US 4000188 A 1989/01/24 US 1987-28353 1987/03/20
 PRAL US 1987-28353
- => s 110 not 111
 L11 131/707 111
 L12 121 110 NOT 111
- => s 110 not 111
 L13 118 110 NOT L11
- => s 113 and (superior or better)
 144981 SUPERIOR
 11 SUPERIORS
 145001 SUPERIOR
 26567 ADVANTAGEOUS
 360922 BETTER
 31 BETTERS
 360949 BETTER
 (BETTER OR BETTERS)
 L14 8 113 AND (SUPERIOR OR ADVANTAGEOUS OR BETTER)
- => d 1-8
- L14 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1995:83814 CAPLUS
 DN 122:34/04
 TI Bionimetic catalyst development for natural gas conversion
 AU Showalter, Margaret C.; Sheinut, John A.; Medforth, Craig J.; Quirke, J.
 Martin E.
 CS Fuel Sci. Dep., Sandia Natl. Lab., Albuquerque, NM, 87185-0710, USA
 SO Preprints of Papers - American Chemical Society, Division of Fuel Chemistry (1990), 39 (4), 1002-5
 CODEN: ACFFA1; ISSN: 0566-3772
 PB American Chemical Society, Division of Fuel Chemistry
 DT Journal
 LA English
- L14 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1994:273484 CAPLUS
 DN 120:273484
 TI Meso-aryl substituted metalloporphyrins supported on imidazole propyl gel (IPG). Catalytic activity in the oxidation of cyclohexane and characterization of iron porphyrin-IPG systems
 AU Iamamoto, Yasuko; Cluff, Katie; Cristina, Sacco; Margarida, Otaciro Rangei Cynthia Maria C.; de Mores, Margarida; Sacramento, Otaciro Rangei
 CS Dep. Quim., Univ. Sao Paulo, Ribeirao Preto, Brazil
 SO Journal of Molecular Catalysis (1994), 88 (2), 167-76
 CODEN: JMCAFS; ISSN: 0304-5102
 DT Journal
 LA English
- L14 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:448837 CAPLUS
 DN 119:48837
 TI Anchored manganese and ruthenium porphyrins as catalysts in the decomposition of cyclohexyl hydroperoxide
 AU Hansen, C. B.; Hoogers, G. J. J. Drent, W.
 CS Debye Inst., Utrecht Univ., Utrecht, 3584 CH, Neth.
 SO Journal of Molecular Catalysis (1993), 79 (1-3), 153-63
 CODEN: JMCAFS; ISSN: 0304-5102
- => d abs 2
- L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 AB Carbamates are prepared by oxidative carbonylation of primary or secondary amines or ureas with CO in presence of an alc., an O-containing oxidizing agent, metallocporphyrin or metal phthalocyanine catalyst derived from

- DT Journal Sch. Chem. Sci., Univ. Illinois, Urbana, IL, 61801, USA
 LA English SO Journal of the American Chemical Society (1996), 108(23), 7281-6
 OS CASREACT 119:48837 CODEN: JACSAT; ISSN: 0021-7863
- L14 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1993:124017 CAPLUS
 DN 118:124017
 TI Studies on the catalytic effects of organic compounds by polymer-bonded
 metalloporphyrins
 AU Lee, Sung Ju; Paeng, Ki Jung; Whang, Kyu Ja
 CS Journal of the Korean Chemical Society (1992), 36(5), 744-52
 SO Journal of the Korean Chemical Society (1992), 36(5), 744-52
 CODEN: JKCSZE; ISSN: 0418-2472
 DT Journal
 LA Korean
 L14 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1992:514005 CAPLUS
 DN 117:114005
 TI Nitrated metalloporphyrins as catalysts for alkane oxidation
 IN Ellis, Paul E., Jr.; Lyons, James E.
 PA Sun Refining and Marketing Co., USA
 SO U.S./ 3 PP.
 DT Patent
 LA English
 FAN, CNT 3
 PATENT NO. KIND DATE APPLICATION NO. DATE
 --- --- --- --- ---
 PI US 5120882 A 19920609 US 1991-758147
 US 5280115 A 19940118 US 1992-992106
 CA 2077983 AA 19930313 CA 1992-2077983
 EP 532326 A2 19930317 EP 1992-308246
 EP 532326 A3 19930428
 EP 532326 B1 19960417
 JP R: BE, DE, FR, GB, IT, NL
 JP 05263684 A2 19931012 JP 1992-267792
 PRAI US 1991-758147 A2 19910912
 US 1992-892106 A
 OS MARPAT 117:114005 A 19920602
 L14 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 DN 115:255400
 TI Highly oxidation resistant inorganic-porphyrin analog polyoxometalate
 oxidation catalysts. 2. Catalysis of olefin epoxidation and aliphatic
 and aromatic hydroxylation. Catalysts starting from α -
 P2W10 δ (Mn $^{3+}$ -Br) (n-11) (Mn $^{3+}$ = Mn $^{3+}$, Fe $^{3+}$, Co $^{2+}$, Ni $^{2+}$, Cu $^{2+}$), including
 quantitative comparisons to **metalloporphyrin catalysts**
 AU Mansuy, Daniel; Bartoli, Jean Francois; Battioni, Pierrette; Lyon, David
 CS Lab. Chim. Biochim. Pharmacol. Toxicol., Univ. Rene Descartes, Paris,
 75270, FR.
 SO Journal of the American Chemical Society (1991), 113(19), 7222-6
 CODEN: JACSAT; ISSN: 0021-7863
 DT Journal
 LA English
 OS CASREACT 115:255400
 L14 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1986:1608315 CAPLUS
 DN 105:08315
 TI Shape-selective alkane hydroxylation by **metalloporphyrin catalysts**
 AU Cook, Bruce R.; Reinert, Thomas J.; Susslick, Kenneth S.
 CS Sch. Chem. Sci., Univ. Illinois, Urbana, IL, 61801, USA
 SO Journal of the American Chemical Society (1996), 108(23), 7281-6
 DT Journal
 LA English
 OS CASREACT 105:208315
 L14 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1983:160198 CAPLUS
 DN 98:160198
 TI Oxidation of sulfide with iodosylarenes catalyzed with metallocporphyrin
 chlorides
 AU Ando, Wataru; Tajima, Rieko; Toshikazu
 CS Dep. Chem., Univ. Tsukuba, Ibaraki, 305, Japan
 SO Tetrahedron Letters (1982), 23(16), 1665-8
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 98:160198
 => s c-h bond oxidation
 34011/2 C
 2609219 H
 523944 BOND
 260013 BONDS
 673338 BOND
 (BOND OR BONDS)
 425964 OXIDATION
 4807 OXIDATIONS
 427215 OXIDATION
 731786 OXIDATION OR OXIDATIONS
 9206 OXIDINS
 733707 OXIDIN
 (OXIDIN OR OXIDINS)
 867044 OXIDATION
 31 C-H BOND OXIDATION
 (C (W) H (W) BOND (W) OXIDATION)
 L15
 => s 115 and porph2
 69668 PORPH?
 L16
 2 115 AND PORPH?
 => d 1-2
 L16 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1991:621274 CAPLUS
 DN 127:314073
 TI Synthesis, characterization and reactivity of novel
 bis(tosyliumdoruthenium(VI)) **porphyrin** complexes; x-ray crystal
 structure of a tosylamidodoruthenium(IV) **porphyrin**
 AU Au, Sze-Man; Fung, Wai-Hong; Cheng, Ming-Chuan; Che, Chi-Ming; Peng,
 Shie-Ming
 CS Department of Chemistry, The University of Hong Kong, Hong Kong, Hong Kong
 SO Chemical Communications (Cambridge) (1997), (17), 1655-1656
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 RE, CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
 L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:440256 CAPLUS
 DN 127:121428
 TI Origin of the Oxygen Atom in C-H Bond
 Oxidations Catalyzed by a Water-Soluble Metalloporphyrin
 AU Balahura, Robert J.; Sorokin, Alexander; Bernaud, Jean; Meunier, Bernard
 Chemistry Department, University of Guelph, Ontario, ON, N1G 2W1, Can.
 CS Inorganic Chemistry (1997), 36(16), 3488-3492
 SO CODEN: INOCAJ; ISSN: 0022-1669
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 127:121428

=> d abs 2

L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
 AB The monopersulfate oxidation of 4-isopropylbenzoic acid performed in H218O and catalyzed by a water-soluble metalloporphyrin indicated that half of the oxygen atoms incorporated in 4-(1-hydroxy-1-methylethyl)benzoic acid, the primary hydroxylation product, came from water. A redox tautomerism of the active high-valent hydroxo-metal-oxo porphyrin intermediate coupled with an oxygen rebound mechanism explained this result. Under similar conditions, ketopropene was directly oxidized to 3-benzoylacetophenone, via at least two different reaction pathways. Trapping of radical intermediates by mol. oxygen competed with the oxygen rebound mechanism.

=> s amidation and rhodium porphyrin

27606 AMIDATION
 27627 AMIDATION (AMIDATION OR AMIDATIONS)

67191 RHODIUM
 31 RHODIUM
 67192 RHODIUM (RHODIUM OR RHODIUM PORPHYRIN)

34445 PORPHYRIN
 24064 PORPHYRINS
 40529 PORPHYRIN (PORPHYRIN OR PORPHYRINS)

169 RHODIUM PORPHYRIN (RHODIUM(W) PORPHYRIN)

L17 0 AMIDATION AND RHODIUM PORPHYRIN

=> d his

(FILE 'HOME' ENTERED AT 07:58:26 ON 17 JAN 2006)

FILE 'CAPLUS' ENTERED AT 08:05:25 ON 17 JAN 2006
 L1 169 S RHODIUM PORPHYRIN
 L2 5 S LI AND OXIDATION CATALYST
 L3 164 S LI NOT L2
 L4 0 S LI AND SUPERIOR AND CONVENTIONAL
 L5 0 S LI AND SUPERIOR
 L6 0 S LI AND ADVANTAGEOUS
 L7 13 S LI AND SULF?
 L8 4 S SULFAMIDAT? AND PORPH?
 L9 1 S PORPHYRIN AND SUPERIOR AND CONVENTIONAL AND CATALY?
 L10 121 S METALLOPORPHYRIN CATALYSTS
 L11 3 S LI AND RHODIUM
 L12 121 S LI NOT 111
 L13 118 S LI NOT 111
 L14 8 S LI3 AND (SUPERIOR OR ADVANTAGEOUS OR BETTER)

L15 31 S C-H BOND OXIDATION
 L16 2 S LI5 AND PORPH?
 L17 0 S AMIDATION AND RHODIUM PORPHYRIN
 => s 11 and c-h bond oxidation

3401172 C
 2609219 H
 523944 BOND
 260073 BONDS
 673238 BOND (BOND OR BONDS)

425964 OXIDATION
 4807 OXIDATIONS
 427215 OXIDATION (OXIDATION OR OXIDATIONS)

731786 OXIDIN
 9206 OXINS
 733707 OXIN (OXIDIN OR OXIDINS)

867044 OXIDATION (OXIDATION OR OXIDN)
 31 C-H BOND OXIDATION (C(W)H(W) BOND (W) OXIDATION)
 L18 0 LI AND C-H BOND OXIDATION

=> c cyclic sulfamida?
 298092 CYCLIC?
 336 CYCLICS
 298223 CYCLIC (CYCLIC OR CYCLICS)

L19 207 SULFAMIDA?
 43 CYCLIC SULFAMIDA?
 (CYCLIC(W) SULFAMIDA?)
 => s cyclic sulfamidate?
 34445 PORPHYRIN
 24064 PORPHYRINS
 40529 PORPHYRIN (PORPHYRIN OR PORPHYRINS)

L20 4 L19 AND PORPHYRIN
 => d 1-4

L20 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:1019826 CAPLUS
 DN 142:6580
 TI Intramolecular amidation of sulfamates 1,2,3-oxathiazolidine-2,2-dione and tetrahydro-1,2,3-oxathiazine-2,2-dione derivatives catalyzed by metalloporphyrins
 IN Che, Chi-Mang; Liang, Jiang-Lin
 PA Hong Kong
 SO U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 202,581.
 DT CODEN: USXXCO
 LA Patent
 FAN. CNT 2
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ----- ----- ----- -----
 PI US 2004:236099 A1 20041125 US 2004-790810 20040303
 L1 US 2004:019204 A1 20040129 US 2002-202581 20020723
 PRAT US 2002-202581 A2 20020723
 OS MARPAT 142:6560

L20 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:363764 CAPLUS

- DN 141:123207 L22 39 L19 NOT L20
 TI **Intramolecular C-N Bond Formation Reactions Catalyzed by Ruthenium Porphyrins: Amidation of Sulfamate Esters and Azridination of Unsaturated Sulfonamides**
 AU Liang, Jiang-Lin; Yuan, Shi-Xue; Huang, Jie-Sheng; Che, Chi-Ming
 CS Department of Chemistry and Open Laboratory of Chemical Biology, Institute of Molecular Technology for Drug Discovery and Synthesis, University of Hong Kong, Hong Kong
 SO *Journal of Organic Chemistry* (2004), 69(11), 3610-3619
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT English
 OS CASREACT 141:123207
 RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:76042 CAPLUS
 DN 140:128437
 TI Preparation of **cyclic sulfamides** by metalloporphyrin-catalyzed oxidative intramolecular amidation of sulfamate esters.
 IN Che, Chiming; Liang, Jianglin
 PA The University of Hong Kong, Peop. Rep. China
 SO Eur. Pat. Appl., 16 pp.
 CODEN: EFXWDW
 DT Patent
 LA English
 FAN.CNT 2
 PATENT NO. KIND DATE APPLICATION NO. DATE

 PI EP 1384718 A1 20040128 EP 2003-102223 20030718
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, NG, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE,
 US 2004019204 A1 20040129 US 2002-202581 20020723
 PRAI US 2002-202581 A 20020723
 OS CASREACT 140:128437
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L20 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 DN 138:156471 CAPLUS
 TI Highly diastereo- and enantioselective intramolecular amidation of saturated C-H bonds catalyzed by ruthenium **porphyrins**
 AU Liang, Jiang-Lin; Yuan, Shi-Xue; Huang, Jie-Sheng; Yu, Wing-Yiu; Che, Chi-Ming
 CS Department of Chemistry and Open Laboratory of Chemical Biology of the Institute of Molecular Technology for Drug Discovery and Synthesis, The University of Hong Kong, Hong Kong, Hong Kong
 SO Angewandte Chemie, International Edition (2002), 41(18), 3465-3468
 CODEN: ACIEE5; ISSN: 1433-7851
 PB Wiley VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 138:187747
 RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- => s 119 not 110
 L21 43 L19 NOT L10
 => s 119 not 120
- L22 39 L19 NOT L20
 => d 1-39
 L22 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:1245779 CAPLUS
 TI **Cyclic sulfamates** as lactam precursors. An efficient asymmetric synthesis of (-)-aphanorhine
 AU Bower, John F.; Szeto, Peter; Gallagher, Timothy
 CS School of Chemistry, University of Bristol, Bristol, BS8 1TS, UK
 SO Chemical Communications (Cambridge, United Kingdom) (2005), (46), 5793-5795
 CODEN: CHCOFS; ISSN: 1365-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:1108384 CAPLUS
 DN 144:23117
 TI Homoserine-derived **cyclic sulfamidate** as chiral adduct for the diversity-oriented synthesis of lactam-bridged dipeptides
 AU Galaud, Fabrice; Lubell, William D.
 CS Departement de Chimie, Universite de Montreal, Montreal, QC, H3C 3J7, Can.
 SO Biopolymers (2005), 80(5), 665-674
 CODEN: BIPMAA; ISSN: 0006-3525
 PB John Wiley & Sons, Inc.
 DT Journal
 LA English
 RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:5086169 CAPLUS
 DN 143:194212
 TI A Convenient Enantioselective Synthesis of (S)- α -Trifluoromethylsoserine
 AU Avenoza, Alberto; Bustos, Jesus H.; Jimenez-Oses, Gonzalo; Peregrina, Jesus M.
 CS Departamento de Quimica, Universidad de La Rioja, Logrono, E-26006, Spain
 SO Journal of Organic Chemistry (2005), 70(14), 5721-5724
 CODEN: JOCAAH; ISSN: 0022-3223
 PB American Chemical Society
 DT Journal
 LA English
 RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:378921 CAPLUS
 DN 143:60036
 TI Use of optically active cyclic diethyl sulfamidate 2-phosphonates as chiral synths for the synthesis of β -substituted α -amino phosphonates
 AU Dolence, E.; Kurt, Mayer, Gabriele; Kelly, Brenda D.
 CS School of Pharmacy, University of Wyoming, Laramie, WY, 82071-3375, USA
 SO Tetrahedron: Asymmetry (2005), 16(9), 1583-1594
 CODEN: TASEE3; ISSN: 0957-4166
 PB Elsevier B.V.
 DT Journal
 LA English
 OS CASREACT 143:60036
 RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L22 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:278422 CAPLUS
 AN 142:130501
 TI SN2 vs E2 on quaternary centers. An easy approach to chiral
 P2,2-amino acids from cyclic sulfamides
- AU Avenoza, Alberto; Bustos, Jesus; Corzana, Francisco; Jimenez-Oses, Gonzalo;
 Pereirina, Jesus
- CS Departamento de Quimica, Grupo de Sintesis Quimica de La Rioja,
 Universidad de La Rioja, Logrono, Spain
- SO Phosphorus, Sulfur and Silicon and the Related Elements (2005), 180 (5-6),
 1459-1460
- CODEN: PSSLEC; ISSN: 1042-6507
- PB Taylor & Francis, Inc.
- DT Journal; General Review
- LA English
- RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:199483 CAPLUS
 AN 142:130080
 TI 3-(2,5-Dihydro-1H-Pyrrol-2-ylmethoxy)pyridines: synthesis and analgesic
 activity
- AU Barazanek, Ivan L.; Jonsson, Emma; Cleesson, Alf
 CS Syntegen AB, Söderfälje, S-15102, Sved.
- SO Bioorganic & Medicinal Chemistry Letters (2005), 15 (6), 1637-1640
- CODEN: BMCL8; ISSN: 0960-894X
- PB Elsevier B.V.
- DT Journal
- OS CASREACT 142:430080
- RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:978758 CAPLUS
 AN 142:113834
 TI Substituted Lactams as Vehicles for the Synthesis of
 Substituted Sulfamides
- AU Bower, John F.; Svenda, Jakub; Williams, Andrew J.; Charmant, Jonathan P.
 AU Lawrence, Ron M.; Szeito, Peter; Gallagher, Timothy
 CS School of Chemistry, University of Bristol, Bristol, BS8 1TS, UK
 SO Organic Letters (2004), 6 (25), 4727-4730
- CODEN: ORLETF; ISSN: 1523-7060
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 142:113854
- RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:815203 CAPLUS
 AN 142:23441
 TI An Efficient Preparation of Isosteric Phosphonate Analogues of
 Sphingolipids by Opening of Oxirane and Cyclic
 Sulfamidate Intermediates with α -Lithiated Alkylphosphonic
 Esters
- AU Sun, Chaode; Bittman, Robert
 CS Department of Chemistry and Biochemistry, Queens College, The City
 University of New York, Flushing, NY, 11367-1597, USA
- SO Journal of Organic Chemistry (2004), 69 (22), 7694-7659
- CODEN: JOCEAH; ISSN: 0022-3263
- PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 142:23441
 RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:235459 CAPLUS
 DN 141:54588
 TI SN2 vs. E2 on quaternary centers: an application to the synthesis of
 enantiopure β 2,2-amino acids
- AU Avenoza, Alberto; Bustos, Jesus H.; Corzana, Francisco; Jimenez-Oses,
 Gonzalez; Peregrina, Jesus M.
- CS Departamento de Quimica, Grupo de Sintesis Quimica de La Rioja,
 U.A.-C.S.I.C., Universidad de La Rioja, Logrono, E-26006, Spain
- SO Chemical Communications (Cambridge, United Kingdom) (2004), (8), 980-981
- CODEN: CHCOFS; ISSN: 1365-7345
- PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 141:54588
 RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:633616 CAPLUS
 DN 139:197488
 TI Regional and stereoselective synthesis of sulfamides from 1,2-diols using
 Burgess-type reagents and their conversion to β -amino alcohols
- IN Nicolaou, Kyriacos C.; Snyder, Scott A.; Huang, Xiaohai
 PA The Scripps Research Institute, USA
- SO PCT Int. Appl., 26 pp.
- DT Patent
- LA English
- PAN.CNT 1
 PATENT NO. ----
 KIND ----
 DATE ----
 APPLICATION NO. ----
 DATE ----
- PI WO 2003066549 A2
 WO 2003066549 A3
 200304325
 20030207
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KW, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, OM, PH,
 PL, PT, RO, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BE,
 BJ, CF, CG, CL, CM, GA, GN, GO, GM, ML, MR, NE, SN, TD, TG
- PRAI US 2002-355068P P
 20020207
 OS CASREACT 139:137488; MARPAT 139:137488
- L22 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:590187 CAPLUS
 DN 140:77120
 TI New application of Burgess reagent in its reaction with epoxides
 Rinner, Uwe; Adams, David R.; dos Santos, Maria L.; Abboud, Khalil A.;
 Hudlicky, Tomas
 CS Department of Chemistry, University of Florida, Gainesville, FL
 SO Syntex (2003), (9), 1247-1252
 CODEN: SYNIES; ISSN: 0936-5214
 PB Georg Thieme Verlag

DT	Journal	US 6737415	B2	20040518	US 6737415	B2	20040518	EP 2002-759457	20020822
LA	English	EP 1418923	A1	20040519	EP 1418923	A1	20040519	GB, GR, IT, LI, LU, NL, SE, MC, PT,	
OS	CASREACT 140:7120	R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK							
RE,CNT	22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD	JP 200504777	T2	20050217	JP 200504777	T2	20050217	JP 2003-522547	20020822
	ALL CITATIONS AVAILABLE IN THE RE FORMAT	US 2004152669	A1	20040805	US 2003-571670		20031001		
L22	ANSWER 12 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN	US 2004152669	P	20010824					
AN	139:381652 CAPLUS	US 2002-227327	A3	20020822	WO 2002-US27154	W	20020822		
DN	139:381652	OS CASREACT 138:221708: MARPAT 138:221708			RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD				
TI	Synthesis of the spermidine alkaloids (-)-(2R,3R)- and (-)-(2R,3S)-3-hydroxycellulamides: Macrocyclization with oxirane-ring opening and inversion via cyclic sulfamidates	RE.CNT 6 ALL CITATIONS AVAILABLE IN THE RE FORMAT							
AU	Khanian, Nikolai A.; Hesse, Manfred	122 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN							
CS	Organisch-Chemisches Institut der Universitaet zuerich, Zurich, CH-8057, Switz.	AN 2003-135796 CAPLUS							
SO	Helvetica Chimica Acta (2003), 86 (6), 2028-2057	DN 138:304244							
CODEN: HCACAV; ISSN: 0018-019X	TI 1,2-Cyclic Sulfamidates as Versatile Precursors to Thiomorpholines and Piperazines	TI 1,2-Cyclic Sulfamidates as Versatile Precursors to Thiomorpholines and Piperazines							
PB	Verlag Helvetica Chimica Acta	AU Williams, Andrew J.; Chaithong, Suda; Gray, Diane; Lawrence, Ron M.; Galagher, Timothy							
DT	Journal	CS School of Chemistry, University of Bristol, Bristol, BSB 1TS, UK							
LA	English	SO Organic Letters (2003), 5 (6), 811-814							
OS	CASREACT 139:301652	CODEN: ORL87; ISSN: 1523-7060							
RE,CNT	36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD	PB American Chemical Society							
	ALL CITATIONS AVAILABLE IN THE RE FORMAT	DT Journal							
L22	ANSWER 13 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN	LA English							
AN	2003:537522 CAPLUS	OS CASREACT 138:304244							
TI	Synthesis of F18 radiolabelled 3-aminooxy-2-fluoropropanamine, an ornithine decarboxylase inhibitor, for positron emission tomography tumor imaging	RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD							
AU	Murali, Dhanabalan; DeJesus, Onofre T.	ALL CITATIONS AVAILABLE IN THE RE FORMAT							
CS	Medical School, Department of Medical Physics, University of Wisconsin-Madison, Madison, WI, USA	122 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN							
SO	Abstracts, 35th Great Lakes Regional Meeting of the American Chemical Society, Chicago, IL, United States, May 31-June 2 (2003), 149 Publisher:	AN 2002-488378 CAPLUS							
TI	AU Posakony, Jeffrey J.; Grierson, John R.; Tewson, Timothy J.	DN 137-201271							
AU	Murali, Dhanabalan; DeJesus, Onofre T.	TI New Routes to N-Alkylated Cyclic Sulfamides							
CS	CS PET Imaging Center, Department of Radiology, University of Iowa, Iowa City, IA, 52242-1007, USA	AU Posakony, Jeffrey J.; Grierson, John R.; Tewson, Timothy J.							
SO	Journal of Organic Chemistry (2002), 67 (15), 5164-5169	SO Journal of Organic Chemistry (2002), 67 (15), 5164-5169							
TI	CODEN: JOCEAH; ISSN: 0022-3263	PB American Chemical Society							
AU	OS CASREACT 137:201271	RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD							
LA	English	ALL CITATIONS AVAILABLE IN THE RE FORMAT							
L22	ANSWER 14 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN	122 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN							
AN	2003:173445 CAPLUS	AN 2002-414659 CAPLUS							
DN	138:221708	DN 137-262753							
TI	Preparation of antibacterial agents based upon oxyanion binding	TI Substitution reactions of hindered cyclic sulfamides							
AU	Cooper, Stephen R.; Yager, Kraig M.	AU Posakony, Jeffrey J.; Tewson, Timothy J.							
CS	Quorum Pharmaceuticals, Inc., USA	CS Department of Radiology, Imaging Research Laboratory, University of Washington, Seattle, WA, 98195, USA							
SO	PCT Int. Appl.: 29 pp.	SO Synthesis (2002), (7), 839-864							
TI	CODEN: PIXX2	SO SYNTHETIC; ISSN: 0039-7881							
PA	Conference: Meeting Abstract	PB Georg Thieme Verlag							
LA	English	DT Journal							
L22	ANSWER 14 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN	LA English							
AN	2003:173445 CAPLUS	OS CASREACT 137:262753							
DN	138:221708	RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD							
TI	Preparation of antibacterial agents based upon oxyanion binding	ALL CITATIONS AVAILABLE IN THE RE FORMAT							
AU	PI 2003018029	122 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN							
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CR, CH, CN, CO, CR, CU, C2, C2, DE, DK, DE, DZ, EC, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KP, KR, KZ, LC, LR, LS, LT, LU, MA, MD, MG, MN, MN, MY, NO, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW,	PI 2003018029	20020822	20020822	20020822				
AM, AZ, BY, KG	AM, AZ, BY, KG	AM, AZ, BY, KG							
RW: GH, GM, KE, LS, MW, SD, SL, SZ, T2, US, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, IU, MC, NL, PT, SE, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, NE, SN, TD, TG	RW: GH, GM, KE, LS, MW, SD, SL, SZ, T2, US, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, IU, MC, NL, PT, SE, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, NE, SN, TD, TG	CA 20030306	CA 2002-2455504	20020822	20020822				
CA 2455504	CA 2455504	CA 20030306	CA 2002-2455504	20020822	20020822				
US 2003105062	US 2003105062	AI 20030605	US 2002-227327	20020822	20020822				
		DN 137-232363							

- TI Fluoroamines via chiral **cyclic sulfamides**
AU Posakony, Jeffrey J.; Tenson, Timothy J.
CS Department of Radiology Imaging Research Laboratory, University of Washington, Seattle, WA, 98195, USA
SO Synthesis (2002), (6), 766-770
CODEN: SYNBF; ISSN: 0039-7881
PB Georg Thieme Verlag
DT Journal
LA English
OS CASREACT 137:232363
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:312318 CAPLUS
TI Radiolabelled Amino Acids for Tumor Imaging with PET: Radiosynthesis and Biological Evaluation of 2-Amino-3-[18F]fluoro-2-methyl-propanoic Acid and 3-[18F]fluoro-2-methyl-2-(methylamino)propanoic Acid
AU McConathy, Jonathan; Martarelli, Laurent; Malveaux, Eugene J.; Camp, Vernon M.; Simpson, Nicholas E.; Simpson, Chiab P.; Bowers, Geoffrey D.; Olson, Jeffrey J.; Goodman, Mark M.
CS Department of Radiology and Department of Neurosurgery, Emory University Hospital School of Medicine, Atlanta, GA, 30322, USA
SO Journal of Medicinal Chemistry (2002), 45(11), 2240-2249
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:242227 CAPLUS
TI A novel regio- and stereoselective synthesis of sulfamides from 1,2-diols using Burgess and related reagents: a facile entry into 0-amino alcohols
AU Nicolaou, K. C.; Huang, Xianhai; Snyder, Scott A.; Rao, Paraselli Bheema; Bellia, Marco; Reddy, Mai V.
CS Department of Chemistry and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA
SO Angewandte Chemie, International Edition (2002), 41(5), 834-838
CODEN: ACIEPS; ISSN: 1433-7851
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 137:63015
RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:142215 CAPLUS
TI Application of Serine- and Threonine-Derived **cyclic sulfamides** for the Preparation of S-linked Glycosyl Amino Acids in Solution- and Solid-Phase Peptide Synthesis
AU Cohen, Scott B.; Halcomb, Randall L.
CS Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO, 80309-0215, USA
SO Journal of the American Chemical Society (2002), 124(11), 2534-2543
CODEN: JACSA; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
- OS CASREACT 136:340963
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:138872 CAPLUS
TI New carbon-carbon bond forming reactions of cyclic sulfate esters and **cyclic sulfamides**
AU Pound, Melanie K.; Davies, Darren L.; Pilkington, Melanie; de Pina Vaz Souza, Maria M.; Wallis, John D.
CS Department of Chemistry and Physics, The Nottingham Trent University, Nottingham, NG11 8NS, UK
SO Tetrahedron Letters (2002), 43(10), 1915-1918
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 137:185078
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:614599 CAPLUS
DN 135:344718
TI N-(9-Phenylfluorenyl)homoserine-Derived **Cyclic sulfamides**: Novel Chiral Products for the Synthesis of Enantiopure γ -Substituted α -Amino Acids
AU Atfani, Mohamed; Wei, Ian; Lubell, William D.
CS Departement de Chimie, Universite de Montreal, Montreal, QC, H3C 3J7, Can.
SO Organic Letters (2001), 3(19), 2965-2968
CODEN: ORLETF; ISSN: 1522-7060
PB American Chemical Society
DT Journal
LA English
OS CASREACT 135:344718
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:152423 CAPLUS
DN 134:296067
TI Scope and limitations in the use of N-(PhF)serine-derived **cyclic sulfamides** for amino acid synthesis
AU Wei, Ian; Lubell, William D.
CS Departement de Chimie, Universite de Montreal, Montreal, QC, H3C 3J7, Can.
SO Canadian Journal of Chemistry (2001), 79(1), 94-104
CODEN: CJCHAG; ISSN: 0008-4042
PB National Research Council of Canada
DT Journal
LA English
OS CASREACT 134:296067
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L22 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:11903 CAPLUS
DN 134:208075
TI Synthesis of S-Linked Glycosyl Amino Acids in Aqueous Solution with Unprotected Carbohydrates
AU Cohen, Scott B.; Halcomb, Randall L.
CS Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO, 80309-0215, USA
SO Organic Letters (2001), 3(3), 405-407
CODEN: ORLETF; ISSN: 1523-7060

- PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 134:208075
 RE. CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2000:523459 CAPLUS
 DN 133:267096
 TI Racemization in the Use of N-(9-(9-Phenylfluorenyl))Serine-Derived
 Cyclic Sulfamidates in the Synthesis of 6-Keto
 α -Amino Carboxylates and Prolines
 AU Wei Ian; Lubell, William D.
 CS Departement de Chimie, Universite de Montreal, Montreal, QC, H3C 3J7, Can.
 SO Organic Letters (2000), 2(17), 2595-2598
 CODEN: ORLEFT; ISSN: 1523-7060
 PB American Chemical Society
 DT Journal
 LA English
 RE. CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:672133 CAPLUS
 DN 132:19930
 TI A short synthesis of chiral peraza-macrocycles through opening of
 cyclic sulfamidates
 AU Kim B. Moon; So, Soon Mog
 CS Department of Chemistry and Center for Molecular Catalysis, College of
 Natural Sciences, Seoul National University, Seoul, 151-742, S. Korea
 SO Tetrahedron Letters (1999), 40(43), 7687-7690
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 RE. CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:333921 CAPLUS
 DN 131:17060
 TI Generation of unnatural α,α -disubstituted amino acid
 derivatives from cyclic sulfamidates
 AU Boulton, Lee T.; Stock, H. Thijs; Raphy, Jennifer; Horwell, David C.
 CS Park-Davis Neuroscience Research Centre, Cambridge University, Cambridge,
 CB2 2QB, UK
 SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
 Bio-Organic Chemistry (1999), (11), 1421-1430
 CODEN: JCPRB4; ISSN: 0300-922X
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 131:170602
 RE. CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:320249 CAPLUS
 DN 131:173355
 TI Improved syntheses of fluorinated tertiary butylamines
 AU Ok, Dong; Fisher, Michael H.; Myrvold, Matthew J.; Meinke, Peter T.
 CS Department of Basic Medicinal Chemistry, Merck Research Laboratories,
 Rahway, NJ, 07065-0900, USA
 SO Tetrahedron Letters (1999), 40(20), 3831-3834
- CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 RE. CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1998:454041 CAPLUS
 DN 129:161178
 TI Efficient hydrolysis of β -aminosulfamic acids using a Lewis acid and
 a thiol for the synthesis of 2,3-diaminopropanoic derivatives
 AU Kim, B. Moon; So, Soon Mog
 CS Department of Chemistry and Center for Molecular Catalysis, Seoul National
 University, Seoul, 151-742, S. Korea
 SO Tetrahedron Letters (1998), 39(30), 5381-5384
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 129:161178
 RE. CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:20878 CAPLUS
 DN 128:192852
 TI Synthesis of a Thio-Analog of Lewis X by Regioselective Opening of
 Cyclic Sulfamidates
 AU Aguilera, Begona; Fernandez-Mayoralas, Alfonso
 CS Instituto de Quimica Organica General, CSIC, Madrid, E-28006, Spain
 SO Journal of Organic Chemistry (1998), 63 (8), 2719-2723
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 RE. CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT.
- L22 ANSWER 32 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1997:271338 CAPLUS
 DN 126:130758
 TI Use of cyclic sulfamidates derived from D-allosamine
 in nucleophilic displacements: scope and limitations
 AU Aguilera, Begona; Fernandez-Mayoralas, Alfonso; Jaramillo, Carlos
 CS Dep. Quimica Organica Biologica, Inst. Quimica Organica, Madrid, 28006, Spain
 SO Tetrahedron (1997), 53(16), 5863-5876
 CODEN: TETRAB; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
- L22 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1996:154217 CAPLUS
 DN 124:311654
 TI Nucleophilic displacements on a cyclic sulfamate
 derived from allosamine: application to the synthesis of
 thiooligosaccharides
 AU Aguilera, Begona; Fernandez-Mayoralas, Alfonso
 CS Grupo Carbonílicos, Instituto Química Orgánica, Madrid, 28006, Spain
 SO Chemical Communications (Cambridge) (1996), (2), 127-128
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal

- LA English
 SO Tetrahedron: Asymmetry (1990), 1 (12), 881-4
 CODEN: TASYE3; ISSN: 0957-4166
 DT Journal
 LA English
 OS CASREACT 114:164739
- L22 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1995:380147 CAPLUS
 DN 122:182135
 TI Fluorine for Hydroxy Substitution in Biogenic Amines: Asymmetric Synthesis and Biological Evaluation of Fluorine-18-labeled *p*-Fluorophenylalanylamin as Model Systems
 AU Van Dorp, Marcella E.; Jung, Yong-Woon; Sherman, Philip S.; Kilbourn, Michael R.; Wieland, Donald M.
 CS Michael School, University of Michigan, Ann Arbor, MI, 48109-0552, USA
 SO Journal of Medicinal Chemistry (1995), 38(5), 810-15
 CODEN: JMCHAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 AN 1994:591879 CAPLUS
 DN 121:1918/9
 TI Methyl DL-3-benzyl-2,2-dioxo-1,2,3-oxathiazolidine-4-carboxylate - an intermediate for amino acid synthesis
 AU Grifsonse, Penny; Pilkington, Melanie; Wallis, John D.
 CS Chem. Lab., Univ. Kent, Canterbury, CT2 7NH, UK
 SO Acta Crystallographica, Section C: Crystal Structure Communications (1994), C50(5), 753-5
 CODEN: ACSCCE; ISSN: 0108-2701
 DT Journal
 LA English
 AN 1994:591879 CAPLUS
 DN 121:1918/9
 TI Intermediate for amino acid synthesis
 AU Grifsonse, Penny; Pilkington, Melanie; Wallis, John D.
 CS Chem. Lab., Univ. Kent, Canterbury, CT2 7NH, UK
 SO Acta Crystallographica, Section C: Crystal Structure Communications (1994), C50(5), 753-5
 CODEN: ACSCCE; ISSN: 0108-2701
 DT Journal
 LA English
 L22 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1994:591879 CAPLUS
 DN 121:1918/9
 TI Intermediate for amino acid synthesis - an intermediate for amino acid synthesis
 AU Grifsonse, Penny; Pilkington, Melanie; Wallis, John D.
 CS Chem. Lab., Univ. Kent, Canterbury, CT2 7NH, UK
 SO Acta Crystallographica, Section C: Crystal Structure Communications (1994), C50(5), 753-5
 CODEN: ACSCCE; ISSN: 0108-2701
 DT Journal
 LA English
 L22 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1994:579176 CAPLUS
 DN 121:179176
 TI Stereo- and regiochemical aspects of the Mitsunobu reaction in synthesis of chiral amino ether ligands for asymmetric reactions
 AU Okuda, Manabu; Tomioka, Kiyoshi
 CS Institute of Scientific and Industrial Research, Osaka University, Ibaraki, 567, Japan
 SO Tetrahedron Letters (1994), 35(26), 4585-6
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 121:179176
 L22 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1994:299238 CAPLUS
 DN 120:299238
 TI Synthesis and stability of the cyclic sulfamidate of N-trityl-L-serine methyl ester
 AU Pilkington, Melanie; Wallis, John D.
 CS Chem. Lab., Univ. Kent, Canterbury, CT2 7NH, UK
 SO Journal of the Chemical Society, Chemical Communications (1993), 1857-8
 CODEN: JCCCAT; ISSN: 0022-4936
 DT Journal
 LA English
 OS CASREACT 120:299238
 L22 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1991:164739 CAPLUS
 DN 114:164739
 TI Cyclic sulfamidates: new synthetic precursors for β -functionalised α -amino acids
 AU Baldwin, Jack E.; Spivey, Alan C.; Schofield, Christopher J.
 CS Dyson Perrins Lab., Oxford Cent. Mol. Sci., Oxford, OX1 3QY, UK
 SO Tetrahedron: Asymmetry (1990), 1 (12), 877-80
 CODEN: TASYE3; ISSN: 0957-4166
 DT Journal
 LA English
 OS CASREACT 114:143286
 L22 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1991:143286 CAPLUS
 DN 114:143286
 TI The direct synthesis of the cyclic sulfamidate of (S)-prolinol: simultaneous N-protection and activation towards nucleophilic displacement of oxygen
 AU Alker, David; Doyle, Kevin J.; Harwood, Laurence M.; McGregor, Andrew
 CS Pfizer Cent. Res., Sandwich, Kent, CT13 9NJ, UK
 SO Tetrahedron: Asymmetry (1990), 1 (12), 877-80
 CODEN: TASYE3; ISSN: 0957-4166
 DT Journal
 LA English
 OS CASREACT 114:143286
 => s porphyrin and cataly? and superior and acetate
 34415 PORPHYRIN
 40454 PORPHYRINS
 40529 PORPHYRIN (PORPHYRIN OR PORPHYRINS)
 128914 CATALY?
 144931 SUPERIOR
 11 SUPERIORS
 145001 SUPERIOR (SUPERIOR OR SUPERIORS)
 501139 ACEPATE
 27770 ACEPATES
 512670 ACEPATE (ACEPATE OR ACETATES)
 123 1 PORPHYRIN AND CATALY? AND SUPERIOR AND ACETATE
 => d
 L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1992:571098 CAPLUS
 DN 117:171098
 TI Epoxidation of olefin catalyzed by metal porphyrins and Polyethylene glycol and Polyethylene glycol
 AU Xu, Zhenghui; Xi, Zunwei; Jiang, Zizi
 CS Dalian Inst. Chem. Phys., Chin. Acad. Sci., Dalian, 116012, Peop. Rep. China
 SO Fenzi Cuihua (1992), 6(3), 213-19
 CODEN: FECUEN; ISSN: 1001-3555
 DT Journal
 LA Chinese
 => d abs
 L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
 AB The phase transfer catalysis of PEG-X (X = 200, 400, 1000, 2000) in epoxidin of olefins catalyzed by metal porphyrin with NaCl in CH₂Cl₂-H₂O biphase system, a model for mimicking cytochrome P-450, was studied, and compared with that of Me²⁺Cl₂15N+Me³⁺Br⁻ as the PTC. The exptl. results show that PEG-X as PTC were to Me³⁺(CH₂)₁₅NMe³⁺Br⁻, on the basis of their higher catalytic activity and anti-oxidation ability. By anchoring PEG-400 to the metal porphyrin, manganese tetra(p-hydrophenyl) porphyrin, the catalytic activity and stability of the

metal porphyrin catalyst were greatly enhanced. The transfer of -OCl from the aqueous phase to the oil phase was also facilitated. Compared with the free PEG-400 as a PTC, the PEG-400 on the metal porphyrin showed the better transfer ability.

=> d his
(FILE 'HOME' ENTERED AT 07:58:26 ON 17 JAN 2006)
FILE 'CAPLUS' ENTERED AT 08:05:25 ON 17 JAN 2006
L1 169 S RHODIUM PORPHYRIN
L2 5 S LI AND OXIDATION CATALYST
L3 164 S LI NOT L2
L4 0 S LI AND SUPERIOR AND CONVENTIONAL
L5 0 S LI AND SUPERIOR
L6 0 S LI AND ADVANTAGEOUS
L7 13 S LI AND SULF?
L8 4 S SULFAMIDATE? AND PORPH?
L9 1 S PORPHYRIN AND SUPERIOR AND CONVENTIONAL AND CATALYST?
L10 121 S METALLOPORPHYRIN CATALYSTS
L11 3 S LI AND RHODIUM
L12 121 S LI0 NOT 111
L13 118 S LI0 NOT L11
L14 8 S LI3 AND (SUPERIOR OR ADVANTAGEOUS OR BETTER)
L15 31 S C-H BOND OXIDATION
L16 2 S LI5 AND PORPH?
L17 0 S AMIDATION AND RHODIUM PORPHYRIN
L18 0 S LI AND C-H BOND OXIDATION
L19 43 S Cyclic SULFAMIDE?
L20 4 S LI9 AND PORPHYRIN
L21 43 S LI9 NOT LI0
L22 39 S LI9 NOT L20
L23 1 S PORPHYRIN AND CATALYST? AND SUPERIOR AND ACETATE
=> s 13 and oxidation
425964 OXIDATION
4807 OXIDATIONS
427215 OXIDATION
(OXIDATION OR OXIDATIONS)
731786 OXIDN
9206 OXIDNS
733707 OXIDN
(OXIDN OR OXIDNS)
867044 OXIDATION
(OXIDATION OR OXIDN)
L24 22 L3 AND OXIDATION
=> s 124 not 17
L25 21 L24 NOT L7
=> s 125 not 18
MISSING OPERATOR L25 NOT L8
The search profile that was entered contains terms or nested terms that are not separated by a logical operator.
=> s 125 not 18
L26 21 L25 NOT L8
=> s 126 not 19
L27 21 L26 NOT L9
=> s 127 not 110
L28 21 L27 NOT L10
=> s 128 not 111
L29 21 L28 NOT L11
=> s 129 not 12
L30 1362014 12
L30 18 L29 NOT 12
=> s 130 not 112
L31 18 L30 NOT L12
=> s 131 not 114
L32 18 L31 NOT L14
=> s 133 not 115
L33 NOT FOUND
The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).
=> s 123 not 115
L33 1 L23 NOT L15
=> s 132 not 115
L34 18 L32 NOT L15
=> s 134 not 116
L35 18 L34 NOT L16
=> s 135 not 117
L36 18 L35 NOT L17
=> s 136 not 118
L37 18 L36 NOT L18
=> s 138 not 119
L38 NOT FOUND
The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).
=> s 137 not 119
L38 18 L37 NOT L19
=> s 139 not 120
L39 NOT FOUND
The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).
=> s 138 not 120
L39 18 L38 NOT L20
=> s 139 not 121
L40 18 L39 NOT L21
=> d 140 1-18 ibib abs
L40 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004572465 CAPLUS
DOCUMENT NUMBER: 141129528
TITLE: Radiolytic and photochemical reduction of carbon dioxide in solution catalyzed by transition metal complexes with some selected macrocycles
AUTHOR(S): Grodowski, Jan Tadeusz
CORPORATE SOURCE: Zakl. Chem. i Tech. Radiacyjnej, Inst. Chem. i Tech.
Jadrowej, Warszaw, 03-195, Pol.
Raporty ICHU. Seria A (2004), 1/04, 1-56
SOURCE: RISAFY; ISSN: 1425-1343
CODEN: RISAFY; ISSN: 1425-1343

DOCUMENT TYPE: Report; General Review

LANGUAGE: Polish. The main goal of the work presented in this report is an explanation of the mechanism of carbon dioxide (CO₂) reduction catalyzed by transition metal complexes with some selected macrocycles. The catalytic function of two electron exchange centers in the reduction of CO₂, an inner metal and a macrocycle ring, was defined. **Rhodium porphyrins** (ClRhIIIP) in alc. alkaline and slightly acidic solns. are reduced photochem. and radiolytically to RhIP- and to HRhIIIP states, resp. The photocatalytic formation of H₂ takes place in the system, but no catalytic activity of ClRhIIIP towards CO₂ reduction was found. Iron porphyrins exhibit the catalytic reduction of CO₂. Iron porphyrins in organic solvents and water are reduced photochem. and radiolytically to the FeIP- state and further reduced forms. In solns. a decay of the FeIP- state is accelerated by H⁺ and CO₂ reactions with the FeO²⁻ state. The latter state is formed via disproportionation of H₂. Application of p-terphenyl (TP) as an addnl. photosensitizer increases by one order of magnitude the yield of CO and HCOO- formed during photolysis of CO₂ - saturated soln., containing iron and cobalt porphyrins. TP in a presence of triethylamine (TEA) undergoes photoredn. to the radical anion TP \bullet^- . The latter species as a strong reductant, reduces subsequently metalloporphyrins to MOP₂²⁻ states. The MOP₂²⁻ state of a porphyrin is responsible for CO₂ reduction. Side reactions lead to the formation of H₂ and the hydrogenation of a porphyrin ring. Phthalocyanines (Pc), in comparison with porphyrins, are characterized by the more extended aromatic structure and they are more resistant for degradation. Cobalt and iron phthalocyanines are easily reduced to the MIPc²⁻ state. However, the latter state does not react with CO₂. The more reduced form, anion radical MIPc²⁻, is responsible for CO₂ reduction that leads to the formation of CO and HCOO-. Phthalocyanines are less efficient reducers of CO₂ in comparison with porphyrins. Investigations of cobalt corrins show, that these complexes are more efficient in the catalysis of CO₂ photored. in comparison with cobalt porphyrins. CO₂ is reduced by an intermediate Co(II) corrin complex formed in one electron reduction of the CoI complex. Corroles having a smaller macrocycle cavity than porphyrins and a more unsatd. character in comparison with corrins, stabilize better a metal center at higher oxidation states in comparison with porphyrins. Because of that their M_I oxidation state reacts with CO₂ and thus it becomes a precursor of CO and HCOO- formation, with the yields comparable with metalloporphyrin systems. Due to the fact, that the side reactions cause a ring degradation, it was checked whether the metal ions released during the degradation process could also catalyze CO₂ reduction. It was found that FeI iron ions react with CO₂ to form an adduct, a direct precursor of CO. A protonated form of FeI is responsible for H₂ formation instead. A possibility of four-, six- and eight-electrons CO₂ reduction was studied in aqueous solns. containing CO₂ and Cu(II) copper ions. This study was initiated by the observation of methane formation during electrochem. reduction of CO₂ on the copper electrode. It was established that a presence of Cu(II) and a reduced form of CO₂-radical anion \bullet CO₂⁻, is necessary for CO reduction.

CODEN: INOCAJ; ISSN: 0020-1669

American Chemical Society

English

DOCUMENT TYPE: Journal

AB The authors report electrochem. generation of a stable Rh(II) porphyrin (RhIIIP28TPP) from a 4-coordinate Rh(II) precursor [Rh(IV)TPP] - dissolved in weakly coordinating electrolyte solns. This work provides the 1st example of an unambiguously reversible 1-electron electrochem.

oxidation of a Rh(II)por., and demonstrates that electrochem. **oxidation** can be performed under conditions that are compatible with alkane activation. These studies begin to classify those media capable of supporting a stable Rh(II)por., and those that induce disproportionation.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE IN THE RE FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 20031286777 CAPLUS

DOCUMENT NUMBER: 138141108

TITLE: Synthesis and Properties of Rhodium(III) Porphyrin Cyclic Tetramer and Cofacial Dimer

AUTHOR(S): Fukushima, Keiko; Funatsu, Kenji; Ichimura, Akio; Sasaki, Yoichi; Suzuki, Masamitsu; Fujihara, Tetsuaki;

CORPORATE SOURCE: Division of Chemistry, Graduate School of Science, Hokkaido University, Sapporo, 060-0810, Japan

SOURCE: Inorganic Chemistry (2003), 42(10), 3167-3193

CODEN: INOCAJ; ISSN: 0020-1669

American Chemical Society

Journal

LANGUAGE: English

OTHER SOURCE (S): CASREACT 138: 411108

AB Rhodium(III) porphyrin complexes, [Rh(4-PyTP)Cl]₄ (1) and [Rh(2-PyTBp)Cl]₂ (2) (4-PyTP = 5-(4-pyridyl)-10,15,20-tri(4-tert-butyl)phenylporphyrinato dianion, 2-PyTBp = 5-(2-pyridyl)-10,15,20-tri(4-tert-butyl)phenylporphyrinato dianion), were self-assembled and characterized by ¹H NMR spectroscopy, IR spectroscopy, and electron spray ionization-mass spectroscopy methods. The spectroscopic results certified that the **rhodium porphyrin** complexes 1 and 2 have a cyclic tetrameric structure and a cofacial dimeric structure, resp. The x-ray structure anal. of 1 confirmed the cyclic structure of the complex. The Soret bands of both oligomers were significantly broadened by excitonic interactions between the porphyrin units, compared to those observed for a corresponding analog of Rh(TTP) (Py)Cl (TTP = 5,10,15,20-tert-butylporphyrinato dianion, Py = pyridine). Stepwise **oxidation** of the porphyrin rings in the oligomers was observed by cyclic voltammetry. The oligomers 1 and 2 are very stable in solution, and they slowly undergo reactions with Pyridine to give corresponding monomer complexes only at high temps. (aprox 80°).

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE IN THE RE FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002189892 CAPLUS

TITLE: Electrocatalysis of a series of rhodium

porphyrins: new understanding of the

relationship between electrochemical properties and coordination properties of the **rhodium porphyrins**. DiMaggio, Stephen G.; Sun, Haoran; Biffinger, Justin; Nelson, Andrew P. Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE, 68588-0304, USA. Abstracts of Papers, 223rd ACS National Meeting, Orlando, FL, United States, April 7-11, 2002 (2002), INOR-289. American Chemical Society; Washington, D.

DOCUMENT NUMBER: 1391187329

TITLE: Reversible Electrocatalytic Generation of a Rhodium(II) Porphyrin: Thwarting Disproportionation with Weakly Coordinating Anions

AUTHOR(S): Sun, Haoran; Xue, Feng; Nelson, Andrew P.;

CORPORATE SOURCE: Department of Chemistry and Center for Materials

SOURCE:

Research and Analysis, University of Nebraska,

Lincoln, NE, 68588-0304, USA. Inorganic Chemistry (2003), 42(15), 4507-4509

SOURCE:

- C. CODEN: 69CKQ
CONFERENCE; Meeting Abstract
LANGUAGE: English
AB The electrochem. properties of a series of rhodium thiaporphyrins and perfluorinated rhodium **porphyrins** are investigated by cyclic voltammetry, square-wave voltammetry, macroelectrode steady voltammetry, in-situ spectroelectrochemistry, and digital simulation in various media. The electrochem. properties are strongly dependent on the coordination properties of the **rhodium porphyrins**. For example, when triphenylphosphine presents in 1,2-difluorobenzene solution two steps reversible one-electron oxidation of rhodium(I) thiaporphyrin instead of one step irreversible two-electron **oxidation** of perfluorinated rhodium(II) porphyrin are observed. The detailed electrochem. reaction mechanism and the relationship between electrochem. properties and coordination properties of the **rhodium porphyrins** are discussed.
- L40 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:8:3409 CAPLUS
DOCUMENT NUMBER: 127:16:8078
TITLE: Electrochemical generation of rhodium **porphyrin** hydrides. Catalysis of hydrogen evolution
Grass, Valerie; Saveant, Jean-Michel
Laboratoire d'Electrochimie Moléculaire de
1 Université Denis Diderot, Unité Associate au CNRS No
438, Paris, 75251, Fr.
Journal of the American Chemical Society (1997),
119(32), 7526-7532
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: CONFERENCE; Meeting Abstract
LANGUAGE: English
AB Porphyrins are directly reduced in Rh(I) complexes which react readily with Bronsted acids to give Rh(III) hydrides. They then undergo, at a more neg. potential, an addnl. electron uptake to yield the corresponding Rh(II) hydrides. The electrogenerated rhodium(II) complex is the key intermediate of catalytic hydrogen evolution according to a mechanism which heavily depends on the solvent and on axial ligands. In DMSO, hydride transfer from Rh(II)H- to the acid, yielding H2, competes with hydride transfer reduction of the solvent by both Rh(II)H and Rh(II)H-. In a less-complexing solvent, such as butyronitrile, hydrogen evolution occurs both by hydride transfer to the acid and H-atom abstraction to the solvent. The latter pathway is shut off by the addition of strong and soft ligands such as tertiary phosphines. With PET3, a particularly strong electron-donating ligand, not only Rh(II)H- but also Rh(III)H triggers H2 evolution. The various changes of the hydrogen evolution mechanism as well as the stability of the catalyst can be rationalized by the variation of the electron d. distribution brought about by the presence or the absence of the axial ligand.
- 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L40 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:21:1300 CAPLUS
DOCUMENT NUMBER: 126:32:2342
TITLE: Reductive Electrochemistry of Rhodium **Porphyrins**. Disproportionation of Intermediary Oxidation States
AUTHOR(S): Grass, Valerie; Saveant, Jean-Michel;
CORPORATE SOURCE: Laboratoire d'Electrochimie Moléculaire, Université Denis Diderot, Paris, 75251, Fr.
SOURCE: Journal of the American Chemical Society (1997),
- 119(15), 3536-3542
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: CONFERENCE; Meeting Abstract
LANGUAGE: English
AB The reduction of rhodium(III) porphyrins in polar aprotic solvents is a two-electron irreversible reaction yielding directly the Rh(II) complex. The cause of this irreversibility is not the metal-metal dimerization of the initially formed Rh(II) complex as believed earlier but rather deligation which generates a secondary Rh(II) species easier to reduce than the starting Rh(III) porphyrin. This is confirmed by the fact that sterically encumbered porphyrins, such as those bearing cross-trans basket-handle superstructures which forbid the approach of two mols. at bonding distance, exhibit the same behavior as simple rhodium **porphyrins**. The occurrence of such an ECE-disproportionation process, seldom observed in the redox chemical of metallocporphyrins or similar complexes, is probably related to the tendency of the rhodium atom to shift out of the porphyrin plane, particularly at the Rh(II) **oxidn** state. It is remarkable that strong and soft ligands, e.g., tertiary phosphines, annihilate the disproportionation of the rhodium(II) complex.
- REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L40 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:7:7551 CAPLUS
DOCUMENT NUMBER: 123:22:8440
TITLE: Novel chemistry of highly reactive metal complexes: oxidative cross-linking of proteins mediated by a nickel-peptide complex and investigations of the rhodium porphyrin-catalyzed cyclopropanation of olefins by diazo esters
AUTHOR(S): Brown, Kathryn; Corinne Univ., Austin, TX, USA
CORPORATE SOURCE: Univ. Microfilms Int., Order No. DA9519234
SOURCE: From Diss. Abstr. Int., B 1995, 56(2), 821
DOCUMENT TYPE: DISSERTATION
LANGUAGE: English
- L40 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:4:36225 CAPLUS
DOCUMENT NUMBER: 119:36:225
TITLE: Factors influencing the site of electroreduction in rhodium porphyrins
AUTHOR(S): Kadish, K. M.; Tagliatesta, P.; Boschi, T. Dep. Chem., Univ. Houston, Houston, TX, 77204-5641, USA
CORPORATE SOURCE: Inorganic Chemistry (1993), 32(14), 2996-3002
SOURCE: CODEN: INOCAU; ISSN: 0020-1669
DOCUMENT TYPE: JOURNAL
LANGUAGE: English
AB The electrochem. of Rh(III) porphyrins containing bound phosphine, isocyanide, or carbene axial ligands was studied by cyclic voltammetry and UV-visible spectroelectrochem. in TlF and CH2Cl2 containing Bu4NPF6 as supporting electrolyte. The studied compds. are represented as [(TPP)Rh(L)2]PF6, (TPP)Rh(L)PF6, or [(TPP)Rh(OH)2]PF6, where TPP is the dianion of tetraphenylporphyrin, L = Ph3, PhMe, PhMe, and CNCH2Ph, and L' = (NHCH2Ph)2. The addition of 1 electron to these complexes leads to 1 of 2 different reduction products, depending upon the temperature and the specific set of axial ligands. Some of the complexes are reversibly reduced by 1 electron to give a transient Rh(II) porphyrin π anion radical, while others are irreversibly reduced under the same solution conditions to give dimeric [(TPP)Rh]2. In several cases, the addition of 1 electron gives a Rh(II)

The dimer at room temperature but a Rh(III) π anion radical at low temperature

The UV-visible data suggest that all of the studied Rh(III) porphyrins are initially reduced at the porphyrin π ring system, and this is also the conclusion based on electrochem. criteria relating the potentials for oxidation and reduction of each metalloporphyrin in nonaq. media. The absolute p. d. between E1/2 for the 1st room temperature oxidation of a given complex in CH2Cl2 and the 1st low-temperature reduction of the same species in THF (the reaction is reversible) ranges at 2.22-2.32 V, suggesting that both electrode reactions involve the porphyrin π ring system. One of the species, [(TPP)Rh(Ph3)(OH)], undergoes a slow conversion of the electrogenerated π anion radical to dimeric [(TPP)Rh]2, and this reaction was followed as a function of time by thin-layer UV-visible spectroelectrochem. in THF. Exchange equilibrium involving bound Ph3 and THF axial ligands were also studied in CH2Cl2 or THF by UV-visible spectroscopy. Both [(TPP)Rh(Ph3)]+ and [(TPP)Rh(Ph3)]2+ are converted to [(TPP)Rh(Ph3)](THF)2+ in neat THF, but the addition of 1.0 equiv of Ph3 to these solns. leads to [(TPP)Rh(Ph3)]2+. This reaction was calculated as 103.1 using spectrophotometric methods.

L40 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:417531 CAPLUS

DOCUMENT NUMBER: 117:7531

TITLE: Asymmetric cyclopentanation of alkenes catalyzed by a rhodium chiral porphyrin
AUTHOR(S): O'Malley, Sean; Kodadek, Thomas
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. Texas, Austin, TX, 78712, USA
SOURCE: Organometallics (1992), 11(6), 2299-302

DOCUMENT TYPE: CAPLUS

LANGUAGE: English

AB The synthesis and catalytic cyclopentanation activity of a new porphyrin known as the chiral fortress macrocycle is reported. This mol. has optically pure naphthyl-pyrrol groups appended directly to the meso carbons of the porphyrin. The iodoindolin derivative is a catalyst for the cyclopentanation of alkenes by Et diazoacetate. The syn cyclopentyl esters are the major product in each case examined except one. In some cases very high diastereoselectivity is observed. The enantiomeric excesses resulting from chiral fortress-mediated reactions are modest.

L40 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:471131 CAPLUS

DOCUMENT NUMBER: 111:77131

TITLE: Synthesis and applications of metalloporphyrins. I. Catalytic reactions by rhodium
porphyrins
AUTHOR(S): Ogoshi, Hisanobu
CORPORATE SOURCE: Fac. Eng., Kyoto Univ., Kyoto, 606, Japan
SOURCE: Yuki Gosei Kagaku Kenkyusho Koenshu (1989), 3, 23-31

DOCUMENT TYPE: CAPLUS

LANGUAGE: Japanese

AB A review with 5 refs., on catalytic reactions using rhodium porphyrin complexes, especially **oxidation** of olefins, reduction of ketones, and aldol condensations.

L40 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:428951 CAPLUS

DOCUMENT NUMBER: 109:28

TITLE: Electrochemical and spectroscopic studies of (P)Rh(R)(L) and [(P)Rh(R)(L)]2+, where P is the dianion of octaethyl- or tetraphenylporphyrin, R is a

σ -bonded alkyl group, and L is triphenylphosphine or dimethylphenylphosphine
Kadish, K. M.; Arriull, C.; Yao, C. L.
Dep. Chem., Univ. Houston, Houston, TX, 77004, USA
Organometallics (1988), 7(7), 1583-7
CODEN: ORGND7; ISSN: 0276-7333
Journal

DOCUMENT TYPE: English

AB The electrochem. and spectroelectrochem. of (P)Rh(R), (P)Rh(R)(L), and [(P)Rh(L)]2+ where P is the dianion of octaethylporphyrin (OEP) or tetraphenylporphyrin (TPP), R is CH3, C2H5, or C4H9, and L is triphenylphosphine or dimethylphenylphosphine are reported. At Polarog. concns. of (P)Rh(R) (c. approx. 10-3 M), the binding of 1 triphenylphosphine ligand and the formation of (P)Rh(R)(Ph3) were observed. This contrasts to lower porphyrin concns. where the bis(triphenylphosphine) adduct [(P)Rh(Ph3)2]+ is formed in solution. Formation consts. for the conversion of (P)Rh(R)(Ph3) were calculated by using electrochem. and spectroscopic methodologies and varied between 1.0 and 4.0 + 103 depending upon the porphyrin macrocycle (OEP or TPP), the specific R group, and the solvent (methylene chloride or benzonitrile). The electrode. of (P)Rh(R)(Ph3) initially leads to a porphyrin π -anion radical and the transient formation of [(P)Rh(R)(Ph3)]- was spectrally characterized on the thin-layer electrochem. time scale. The formation of a porphyrin π -anion radical was also observed after reduction of [(TPP)Rh(PhMe2)2]+. This reaction was characterized by thin-layer spectroelectrochem. and provides the 1st example for reduction of a non- σ -bonded Rh(III) porphyrin at the porphyrin π -ring system.

L40 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:41536 CAPLUS

DOCUMENT NUMBER: 109:13536 CAPLUS

TITLE: Electrochemical studies of dimeric rhodium(III) porphyrins containing a dibasic nitrogen-heterocyclic bridging ligand
Liu, Y. H.; Anderson, J. E.; Kadish, K. M.
Dep. Chem., Univ. Houston, Houston, TX, 77004, USA
Inorganic Chemistry (1988), 27(13), 2320-5
CODEN: INOCJ; ISSN: 0020-1669
Journal

DOCUMENT TYPE: English

AB The electrochem. and spectroelectrochem. of [(P)RhCl]2L, where P is the dianion of tetraphenylporphyrin (TPP) or octaethylporphyrin (OEP) and L is a conjugated dibasic N-heterocyclic ligand such as 4,4'-bipyridine (bpy), trans-1,2-bis(4-pyridyl)ethane (BPE) or a nonconjugated N-heterocyclic ligand such as 1,2-bis(4-pyridyl)ethene (TMDP), are reported. The Rh(III) dimers with BPA or TMDP nonconjugated bridging ligands undergo 1 irreversible metal-centered reduction in THF or methylene chloride. However, 2 overlapping irreversible metal center redns. are observed for Rh(III) dimers that are linked via the conjugated bridging ligands, bpy and BPE. In all cases, [(P)Rh]2 and the free N-heterocyclic ligand are generated as products from 1 or more chemical reactions that follow the metal-centered reduction of Rh(III) to Rh(II). Two reversible 2-electron **oxidants** are observed for [(P)RhCl]2L, where L = BPE, BPA, and TMDP. This behavior contrasts with the case for [(P)RhCl]2bpy, which undergoes a single reversible 2-electron transfer followed by 2 reversible 1-electron **oxidants**. On the basis of the electrochem. and spectroelectrochem. data, an overall mechanism for reduction and **oxidation** of the [(P)RhCl]2 complexes is presented.

L40 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:112169 CAPLUS

DOCUMENT NUMBER: 108:112169 CAPLUS

TITLE: Photosensitized hydride transfer. Highly

regioselective 1,4-photoreduction of NAD(P)+ models under visible light with an organometallic rhodium(III) porphyrin as sensitizer

Aoyama, Yasuhiro; Midorikawa, Koji; Toi, Hiroo; Dep. Mater. Sci., Technol., Univ. Nagaoa, Niigata, 940-21, Japan

Chemistry Letters (1987), (8), 1651-4

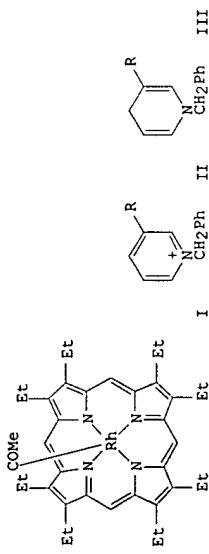
CODEN: CMILAG; ISSN: 0366-7022

Journal 1

English

CASREACT 108:112169

OTHER SOURCE (S): GI



AB On irradiation with visible light the Rh porphyrin complex I catalyzed the reduction of pyridinium ions II (R = CONH₂, Ac) by Ph4B⁻ with Me₂CHOH as a proton source to give the 1,4-dihydropyridines III as the sole reduction products and biphenyl as the oxidation product of Ph4B⁻.

L40 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1071224874

DOCUMENT NUMBER: CAPLUS
TITLE: Electrocatalysis of rhodium porphyrins

AUTHOR (S): Yao, Chaoliang
CORPORATE SOURCE: Univ. Houston, Houston, TX, USA
SOURCE: Diss. Abstr. Int. B 1987, 48(4), 1029-30

DOCUMENT TYPE: Dissertation

LANGUAGE: English

AB Unavailable

L40 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1041088322

DOCUMENT NUMBER: CAPLUS
TITLE: Catalytic reactions of metalloporphyrins. 1.

Catalytic modification of biphenyl as catalyst with rhodium(III) porphyrin as catalyst

Aoyama, Yasuhiro; Fujisawa, Takamichi; Toi, Hiroo; Ogochi, Hisanobu
Dep. Mat. Sci., Technol. Univ. Nagaoa, Niigata, 949-24, Japan

Journal of the American Chemical Society (1986), 108(5), 943-7

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

(Octaethyl- or tetraphenylporphyrinato)rhodium(III) chloride shows an

efficient catalysis in the aerobic reduction of ketone with NaBH₄ in THF. The initial step in the catalytic cycle is the rate-determining complexation of BH₄- with RhIII porphyrin (RhII + BH₄ → RhII-BH₄) followed by a rapid borane transfer from the adduct to ketone to give dialkoxyborane and hydridorhodium species. In the subsequent step, the Rh-H species undergoes oxidation with O₂ back to RhII with concomitant hydrolysis of dialkoxyborane to alc. Essentially, autocycling RhII and Rh-H act as a borane generator and proton source, resp., in a catalytic manner. Furthermore, the RhII-BH₄ complex capable of transferring borane to ketone lacks what is characteristic of free borane, i.e., facile oxidation with O₂ and ready hydrolysis with H₂O. Thus, the present system provides a highly efficient, catalytic modification of synthetic reactions of borane in the presence of oxygen.

L40 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:414298 CAPLUS

DOCUMENT NUMBER: 10114298

TITLE: Optical absorption and ESR spectra of monomeric

rhodium(II) tetraphenylporphyrin in 2-methyltetrahydrofuran solution at 77 K

AUTHOR (S): Hoshino, Mikio; Yasutoku, Katsutoshi; Konishi, Shiro; Imamura, Masashi

CORPORATE SOURCE: Solar Energy Res. Group, Inst. Phys. Chem. Res., Wako, 351, Japan

SOURCE: Inorganic Chemistry (1984), 23(13), 1982-4

DOCUMENT TYPE: CODEN: INOCAJ; ISSN: 0020-1669

LANGUAGE: English

AB Rh porphyrins have aroused much attention because of the wide variety of their chemical reactions. For instance, Rh porphyrins readily react with the simple mols. H₂, O₂, and NO to produce hydride, oxygen, and nitric acid adducts, resp. The Rh atom incorporated in porphyrin ligands is known to have 3 oxidation states, +1, +2, and +3. However, monomeric Rh(II) porphyrins have neither been isolated nor detected spectroscopically because of their propensity to facile dimerization. This note reports the optical absorption and ESR spectra of monomeric Rh(II) tetraphenylporphyrin (RhII TPP) produced by photolysis of chloro(tetraphenylporphyrinato)rhodium(III) (ClRhII TPP) and dimeric RhII TPP ([RhII TPP]₂) in 2-methyltetrahydrofuran solns. at 77 K.

L40 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:507654 CAPLUS

DOCUMENT NUMBER: 95:107654

TITLE: Dioxygen and nitric oxide complexes of rhodium porphyrins

AUTHOR (S): Wayland, Bradford B.; Newman, Alan R.

CORPORATE SOURCE: Dep. Chem., Univ. Pennsylvania, Philadelphia, PA, 19104 USA

SOURCE: Inorganic Chemistry (1981), 20(9), 3093-7
CODEN: INOCAJ; ISSN: 0020-1669
DOCUMENT TYPE: Journal

AB (RhOEP)₂ (H2OEP = octaethylporphine) reacts with O₂ to form RhOEP(O₂) (S = 1/2), which subsequently forms the 1-peroxo complex (RhOEP(O₂)⁺ EPR (H2OEP) = tetraphenylporphine) and their studies of RhOEP(O₂) and RhTPP(O₂) (H2TPP = tetraphenylporphine) and their 1:1 donor complexes are reported and compared with those of the Co analogs. (RhOEP)₂, RhOEP(O₂), and RhTPP(O₂) all react with NO to ultimately produce the same product, RhOEP(NO). The reactions of RhOEP(Cl) and RhTPP(Cl) with NO proceed through a metastable paramagnetic intermediate Rh(por)₂(Cl)(NO) (por = porphine) which from EPR and electronic spectral studies is formulated as containing a porphyrin π-cation radical unit with an 2Bu₂ ground state. RhOEP(NO)(Cl) assoc. to form a radical dimer (S = 1) with D = 5.17 + 10⁻³ cm⁻¹, E = 2.4 + 10⁻⁴ cm⁻¹, but only monomeric RhTPP(NO)(Cl) is observed

studies of Rh(III) porphyrins also support the porphyrin cation radical formulation for Rh(poc)₃(NO)(Cl) complexes.

L40 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1973:111487 CAPLUS
DOCUMENT NUMBER: 78:111487

TITLE: New rhodium(1)-porphyrin complex. II. Synthesis and
oxidative alkylation
AUTHOR(S): Ogoshi, H.; Omura, T.; Yoshida, Z.
CORPORATE SOURCE: Dep. Synth. Chem. Kyoto Univ., Yoshida, Japan
SOURCE: Journal of the American Chemical Society (1973),
95(51), 1666-8

CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Treating N-methyloctaethylporphyrin with di- μ -chlorobis(dicarbonyl)rhodium (I) gave a rhodium (I) porphyrin complex containing 1 N-methylporphyrin and one [Rh(CO)₂Cl]₂ and formulated as [N-methylporphyrin]₁[Rh(CO)₂Cl]₂ (I). Spectral data indicate N-H and N-Me bonds on the porphyrin inner core. The 220 MHz NMR spectrum of I shows quite low symmetry for the porphyrin frame. I is oxidized to a mono-Rh(III) porphyrin complex with loss of the N-Me₃ bond and methylation of the Rh(III) atom.

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